

Before the Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	MB Docket No. 02-230
Digital Broadcast)	
Copy Protection)	
)	

COMMENTS OF
MEDIA ACCESS GROUP at WGBH
REGARDING
NOTICE OF PROPOSED RULEMAKING
ON DIGITAL BROADCAST COPY PROTECTION

December 6, 2002

Introduction

The Media Access Group at WGBH is pleased to be able to make the following comments regarding the Federal Communications Commission's Notice of Proposed Rulemaking in the Matter of Digital Broadcast Copy Protection (MB Docket No. 02-230) (the "Notice"). The Commission is seeking comment on the impact of the ATSC flag or other digital broadcast copy protection mechanisms on consumers. The Commission relies on the "BPDG Final Report"¹ throughout the Notice and asks questions based on its contents. Nowhere in that report is there any indication that this group considered or was even aware of potential harm to consumers with disabilities or that attention to such a question should be a criteria for approval of any digital broadcast copy protection mechanism. The FCC's closed captioning rules² as well as cable must-carry rules resulting

¹ Final Report of the Co-Chairs of the Broadcast Protection Discussion Subgroup to the Copy Protection Technical Working Group at 4 (June 3, 2002) ("BPDG Final Report").

² FCC 97-279, Closed Captioning Report & Order

from the Cable TV Consumer Protection and Competition Act of 1992³ demand that ancillary broadcast services (closed captions and video descriptions) for people with disabilities be protected.

Background

The WGBH Educational Foundation is one of the country's leading public broadcasters and has long considered one of its central missions to be increasing access to media for people with disabilities. In 1971, WGBH established The Caption Center, the world's first captioning agency, to produce captions for TV programs so that deaf and hard-of-hearing viewers could gain equal access to those programs.

In 1990, WGBH launched Descriptive Video Service® (DVS®). DVS is a free national service, established to provide access to TV programs, home videos and theatrical motion pictures for blind and visually impaired people.

In 1993, in partnership with the Corporation for Public Broadcasting, the CPB/WGBH National Center for Accessible Media (NCAM) was established at WGBH as a research and development facility designed to extend WGBH's previous media access efforts into new media and to further the uses of captioning and descriptive video in the home, classroom, workplace, and community. Since 1995, NCAM has been involved in the crafting of standards for the accessibility of digital television. With grants from the U.S. Department of Education and the Corporation for Public Broadcasting, NCAM has been implementing solutions and providing guidance for closed captioning and video description in the DTV environment.

Impact of the "Broadcast Flag" on Access Services

As the Commission and the proponents of various copy protection and digital rights management schemes deliberate on the technology and timetable for implementation, it is essential that testing and verification procedures be implemented to assure that there is zero impact on the production, encoding, transmission, reception and display of all forms and streams of closed captions and video descriptions. It is not enough to assume there will be no harm – explicit tests must be performed at all levels and within each link in the distribution chain to assure that those who are providing access services and those who rely on them will neither have their service disrupted nor need to develop new methods for working around whatever copy protection system is implemented. A "broadcast flag" or other standard must have zero impact on closed captions and video descriptions.

³ Sections 614 and 615

Previous experience with such situations began with assurances that of course there would be no impact. In the mid 1980's, Macrovision's initial implementation of copy protection for analog VHS tapes in fact required changes by both Macrovision and caption decoder manufacturers to correct a caption garbling problem that could have been caught early if adequate testing had occurred. This situation was rectified only after hundreds if not thousands of deaf and hard of hearing consumers had already purchased equipment which then had to be retrofitted.

Need for a "Disability Impact Statement"

In seeking information on the impact of the proposed broadcast flag, the Commission quotes the BPDG Final Report, "However, BPDG members were unable to agree on the criteria by which a copy protection technology would be evaluated and approved for digital broadcast use and chose to reserve the topic for potential further discussion by a CPTWG parallel group." The Commission then states that, "We seek comment on how a particular technology would receive approval for use in consumer electronics devices for digital broadcast copy protection purposes." One approval criterion is suggested here.

Researchers at NCAM and at the numerous corporations who are concerned about compliance with FCC DTV captioning requirements cannot say at this time that the copy protection schemes discussed in the Commission's Notice will or will not have any impact on accessibility. We therefore would like the Commission to include as part of its NPRM process, and as part of its final Report and Order, a requirement for submission of a formal "Disability Impact Statement" to the Commission, by any standards body or trade association, or by any manufacturer implementing a broadcast flag or other copy protection format or technology. The requirement for assuring that disabled consumers will not be harmed cannot be a burden placed on either the consumer or the relatively small and under-resourced access services industry.

Backward compatibility

Such a Disability Impact Statement should not only carefully test copy protection technologies and their impact on access services in digital TV but should also pay close attention to the significant installed base of analog consumer equipment. The FCC-approved digital TV closed captioning standard ("EIA-708B") itself contains a scheme for supporting past and future caption standards. Similarly, proposed copy protection standards and technology should clearly indicate whether there is any possible impact on analog captioning ("EIA-608") and analog-type captions carried within digital TV signals.

Program and System Information Protocol (PSIP)

The ATSC PSIP standard (A/65) for Digital Television allows broadcasters to identify themselves and convey up to 16 days of programming information.

Consumer electronics manufacturers can use PSIP data to construct interactive electronic program guides to aid navigation of channels in DTV receivers.⁴ In addition, PSIP data is essential for indicating the presence of access services. Without guaranteed availability of PSIP data and appropriate use and display of it in consumer equipment, closed captions and video descriptions which are properly encoded into DTV signals may as well not even exist – consumers will have no way to know of their existence or be able to turn them on or off.

At present the Commission's DTV rules do not require the presence of PSIP data transmission, reception or display. Since the proposed broadcast flag would be carried within PSIP, the need for this sort of copy protection regime is consistent with the need for constantly available PSIP data to assure successful and reliable consumer access to digital TV closed captions and video descriptions. For these reasons, we strongly encourage the Commission to adopt clear and unambiguous requirements for PSIP carriage and use by broadcasters, multiple video program distributors and in all digital TV receivers.

Summary

Clearly content providers have legitimate concerns about misuse and misappropriation of their intellectual property and copyrighted programming. As industry struggles to arrive at a just and equitable technical and legal solution which helps promote the growth and acceptance of digital television, the rights and needs of people with disabilities must not be ignored. Any regulatory or voluntary standards effort must formally take into account existing access requirements and explicitly assure that successful copy protection does not cause any harm to those who provide and those who rely on closed captioning and video description.

Respectfully submitted,

_____/s/____

Larry Goldberg
Director, Media Access
WGBH Educational Foundation
125 Western Avenue
Boston, MA 02134

⁴ Sarnoff Corp. ATSC PSIP Tutorial at their web site: www.sarnoff.com

e-mail: NCAM@wgbh.org

617-300-3400 (voice)

617-300-1035 (Fax)

617-300-2489 (TTY)

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